USB$_2$HDBT

USB 3.1 Gigabit Network Interface Card (NIC) with HDBaseT interface

HDBaseT transport with multiplexed streams

USB 2.0, I2C, I2S, and UART tunnelling

Software-compatible with Valens SDK

Provided as a bare-bone PCB or in a small size enclosure



PRODUCT DESCRIPTION

The **USB$_2$HDBT** provides an HDBaseT interface through a USB 3.1 (Type B) connection.

HDBaseT Automotive is a technology developed by Valens Semiconductor that allows the transmission of audio, data, USB, and Ethernet over a single twisted-pair (UTP) cable, delivering high bandwidth and low latency — up to about 15 meters.

This equipment includes the Valens VA6000 with extended NIC capabilities for rapid integration using a **Gigabit Network Interface Card (NIC) over USB 3.1**.

KEY FEATURES

- **High bandwidth**
  Gigabit NIC over USB 3.1, delivering a high-bandwidth path for NIC traffic.
- **HDBaseT transport**
  Audio, USB, data (Ethernet) signals multiplexed over a single HDBaseT link.
- **Plug-and-Play**
  Simple to use, with no additional drivers required for proper operation.

MAIN APPLICATIONS

USB$_2$HDBT is primarily used in automated test equipment (ATE) for electronic components that employ HDBaseT automotive interfaces, enabling thorough validation of high-speed audio, and data transmission.

Beyond ATE, it can also support design verification setups for R&D teams developing next-generation automotive infotainment systems, production end-of-line testers to guarantee consistent product performance, and quality assurance labs for compliance and interoperability testing.

TECH SPECS

Dimensions (in mm)
50 (w) x 60 (l) x 20 (h)

Weight (in kg)
0.2

Power Supply
/ Voltage: 5V DC
/ Current: 2A (max)
/ Frequency: DC

Connectors

/ MATEnet interface: HDBaseT connection

/ USB 3.1 network card interface: USB 3.1 connection for Gigabit NIC.

/ USB 2.0 Type-A (port 1): Connected to VA6000 USB interface; NIC data may be multiplexed with HDBaseT data as per product design.

/ USB 2.0 Type-A (port 2): Exposes a virtual serial interface (CDC-ACM) for configuration via ValUE (Valens software).

Mod.239HDBT.EN.D1

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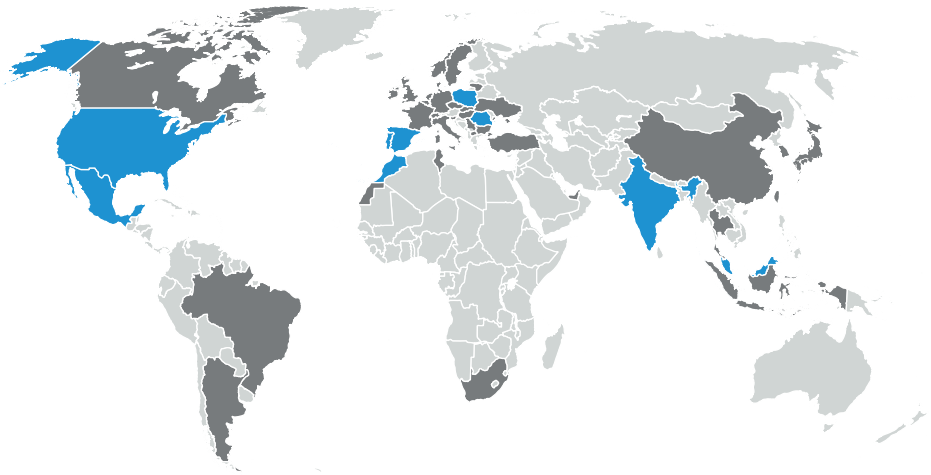

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